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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yoshifumi Hosokawa

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RATNERPRESTIA

P.O. BOX 980

VALLEY FORGE, PA 19482

EXAMINER

SHEDRICK, CHARLES TERRELL

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,978	Applicant(s) HOSOKAWA ET AL.	
	Examiner CHARLES SHEDRICK	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **8-11, 12, 16-19 and 20** rejected under 35 U.S.C. 102(e) as being anticipated by Holma US Patent No: 6,836,471.

Consider **claim 8**, Holma teaches a mobile station capable of communications with both a base station of a first radio communication system, and a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system(**i.e., a dual mode mobile station**)(e.g., see at least **col. 4 line 48, abstract, figures 3 and 4, and summary of invention**), and operating asynchronous to the base station of the first radio communication system(**i.e., via distinct first and second operators**)(e.g., see **col. 2 line 54- col. 3 line 3**), comprising: a radio section that receives a radio wave from each of the first and second radio communication systems(e.g., see at least **mobile station 10 of figure 1**); and a system information detection section that detects system information of the second radio communication system(**i.e., WCDMA and/or GSM system information**)(e.g., see **abstract, col. 1 lines 9-10, col. 4 lines 19-29, col. 5 line 2**), and outputs system detection information(**i.e., the mobile station is an active participant in the handover procedure. The list provided by the**

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BSC/RNC are specific to the mobile station)(e.g., see at least col. 4 lines 19-29), wherein for communications with the base station of the first radio communication system, a switching is made between separate radio communication systems by informing the system detection information to the base station of the first radio communication system(**i.e., inter-system HO**)(e.g., see at least abstract and col. 2 lines 47-51, col. 4 lines 10-18).

Consider **claims 12 and 20**, Holma teaches a mobile station capable of communications with both a base station of a first radio communication system(e.g., see at least **mobile station 10 of figure 1**), and a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system(e.g., see **figures 1 and 2 and col. 2 lines 60-65**), and operating asynchronous to the base station of the first radio communication system(**i.e., via distinct first and second operators**)(e.g., see col. 2 line 54- col. 3 line 3), comprising: a radio section that receives a radio wave from each of the first and second radio communication systems(**i.e., a dual mode mobile station**)(e.g., see at least col. 4 line 48, abstract, **figures 3 and 4, and summary of invention**); a system information detection/estimation section that detects system information of the second radio communication system(**i.e., WCDMA and/or GSM system information**)(e.g., see abstract, col. 1 lines 9-10, col. 4 lines 19-29, col. 5 line 2), and outputs system detection/estimation information(**i.e., the mobile station is an active participant in the handover procedure. The list provided by the BSC/RNC are specific to the mobile station**)(e.g., see at least col. 4 lines 19-29. see also **measurement reporting**); and a storage section that stores the system detection information output from the system information detection section(**e.g., not explicitly shown, however the storage must be provided to hold at**

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least neighbor cell parameters as noted in col. 4 lines 19-29), wherein a switching is made between separate radio communication systems by storing the system detection information in the storage section when no communications are going on with the base station of the first radio communication system(**i.e., inter-system HO**)(e.g., see at least abstract and col. 2 lines 47-51, **col. 4 lines 10-18**), and by informing the system detection information stored in the storage section to the base station of the first radio communication system when communications are through with the base station of the second radio communication system (**i.e., note also that handover can also occur due to a change of radio resources providing a service without necessarily any change of the base stations involved as discussed in col. 4 lines 10-19**).

Consider **claim 16**, Holma teaches a mobile station capable of communications with both a base station of a first radio communication system(**e.g., see at least mobile station 10 of figure 1**), and a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system(**e.g., see at least mobile station 10 of figure 1**), and operating asynchronous to the base station of the first radio communication system(**i.e., via distinct first and second operators**)(e.g., see col. 2 line 54- col. 3 line 3), comprising: a radio section that receives a radio wave from each of the first and second radio communication systems(**i.e., a dual mode mobile station**)(e.g., see at least col. 4 line 48, abstract, figures 3 and 4, and summary of invention); and a system information estimation section that estimates system information of the second radio communication system(**i.e., WCDMA and/or GSM system information which include RSSI**)(e.g., see abstract, col. 1 lines 9-10, col. 4 lines 19-29, col. 5 line 2), and outputs system estimation information(**i.e., the mobile station is an active participant in the**

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handover procedure. The list provided by the BSC/RNC are specific to the mobile station and created based on info fed back from the mobile) (e.g., see at least col. 4 lines 19-29), wherein for communications with the base station of the first radio communication system, a switching is made between separate radio communication systems by informing the system estimation information to the base station of the first radio communication system(**i.e., inter-system HO)**(e.g., see at least abstract and col. 2 lines 47-51, col. 4 lines 10-18).

Consider **claims 9 and 17 and as applied to claims 8 and 16** , Holma teaches wherein the mobile station includes a position detection section that detects position information of the mobile station(**i.e., position with respect to network areas**)(e.g., see at least **figure 1 and col. 5 lines 2 – col. 6 line 31**), for a communications with the base station of the first communication system(**i.e., position with respect to network areas**) (e.g., see at least **figure 1 and col. 5 lines 2 – col. 6 line 31**), and a switching is made between the separate radio systems by informing the system detection information and the position information from the base station of the first radio communication system to the mobile station in the cell for communications by the base station of the first radio communication system(**i.e., inter-system HO)**(e.g., see at least abstract and col. **2 lines 47-51, col. 4 lines 10-18**).

Consider **claims 10 and 18 and as applied to claims 9 and 17**, Holma as modified by Chambert teaches wherein the position detection section detects absolute position information (**i.e., absolute with respect to area**) (e.g., see at least **figure 1 and col. 5 lines 2 – col. 6 line 31**).

Consider **claims 11 and 19 and as applied to claims 2 and 4**, Holma as modified by Chambert, wherein the position detection section detects relative position information from the

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base station (**i.e., relative with respect to borders**) (**e.g., see at least figure 1 and col. 5 lines 2 – col. 6 line 31**).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claims **1-7, 13-15 and 21-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Holma US Patent No: 6,836,471** in view of **Chambert US Patent No.: 5,499,387**

Consider **Claims 1** , Holma teaches a radio communication system(e.g., see **figures 1 and 2**), comprising: a base station of a first radio communication system(e.g., see **figure 2**); a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system(e.g., see **figures 1 and 2 and col. 2 lines 60-65**), and operating asynchronous to the base station of the first radio communication system(i.e., **via distinct first and second operators**)(e.g., see **col. 2 line 54- col. 3 line 3**); and a mobile station capable of communications with both the first and second radio communication systems(e.g., see **at least mobile station 10 of figure 1**), wherein the mobile station includes: a radio section that receives a radio wave from each of the first and second radio communication systems(i.e., **a dual mode mobile station**)(e.g., see **at least col. 4 line 48, abstract, figures 3 and 4, and summary of invention**); and a system information detection section that detects system information of the second radio communication system(i.e., **WCDMA and/or GSM system information**)(e.g., see **abstract, col. 1 lines 9-10, col. 4 lines 19-29, col. 5 line 2**), and outputs system detection information(i.e., **the mobile station is an active participant in the handover procedure. The list provided by the BSC/RNC are specific to the mobile station**)(e.g., see **at least col. 4 lines 19-29**), the base station controller of the first radio communication system includes a storage section that stores the system detection information provided by the mobile station(e.g., see **at least col.3 lines 55-63 and figure 2**), and a switching is made between separate radio systems by informing the system detection information from the base station (i.e., **via the RNC or BSC**) of the first radio

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communication system to the mobile station in the cell for communications by the base station of the first radio communication system(**i.e., inter-system HO**)(e.g., **see at least abstract and col. 2 lines 47-51, col. 4 lines 10-18**).

However, Holma does not specifically teach wherein the storage section is included in the base-station.

In analogous art, Chambert teaches wherein the storage section is included in the base-station (e.g., **see at least col. 6 lines 10-15**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Holma to include a base-station storage section for the purpose of handoff as taught by Chambert.

Consider **claim 3**, Holma teaches A radio communication system, comprising: a base station of a first radio communication system(e.g., **see figures 1 and 2**); a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system(e.g., **see figures 1 and 2 and col. 2 lines 60-65**), and operating asynchronous to the base station of the first radio communication system(**i.e., via distinct first and second operators**)(e.g., **see col. 2 line 54- col. 3 line 3**); and a mobile station capable of communications with both the first and second radio communication systems(e.g., **see at least mobile station 10 of figure 1**), wherein the mobile station includes: a radio section that receives a radio wave from each of the first and second radio communication systems(**i.e., a dual mode mobile station**)(e.g., **see at least col. 4 line 48, abstract, figures 3 and 4, and summary of invention**); and a system information estimation section that estimates system information of the second radio communication

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system(i.e., **WCDMA and/or GSM system information which include RSSI**)(e.g., see **abstract, col. 1 lines 9-10, col. 4 lines 19-29, col. 5 line 2**), and outputs system estimation information(i.e., **the mobile station is an active participant in the handover procedure. The list provided by the BSC/RNC are specific to the mobile station and created based on info fed back from the mobile**)(e.g., see at least **col. 4 lines 19-29**), the base station controller of the first radio communication system includes **a storage section** that stores the system estimation information provided by the mobile station(e.g., see at least **col.3 lines 55-63 and figure 2**), and a switching is made between separate radio communication systems by informing the system estimation information from the base station (i.e., **via the RNC or BSC**) of the first radio communication system to the mobile station in the cell for communications by the base station of the first radio communication system(i.e., **inter-system HO**)(e.g., see at least **abstract and col. 2 lines 47-51, col. 4 lines 10-18**).

However, Holma does not specifically teach wherein the storage section is included in the base-station.

In analogous art, Chambert teaches wherein the storage section is included in the base-station (e.g., see at least **col. 6 lines 10-15**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Holma to include a base-station storage section for the purpose of handoff as taught by Chambert.

Consider **claim 7**, Holma teaches a base station in a radio communication system, comprising: a first base station of a first radio communication system(e.g., see **figures 1 and 2**); a second base station of a second radio communication system including a cell being in close

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proximity to or overlapping a cell for communications by the first base station(e.g., see **figures 1 and 2 and col. 2 lines 60-65**), and operating asynchronous to the first base station(i.e., via **distinct first and second operators**)(e.g., see **col. 2 line 54- col. 3 line 3**); and a mobile station capable of communications with both the first and second radio communication systems(i.e., a **dual mode mobile station**)(e.g., see at least **col. 4 line 48, abstract, figures 3 and 4, and summary of invention**), wherein **the first base station includes**: an other system reception section that receives a radio wave from the second base station(i.e., **the other reception section receives the radio wave from the base station via the BSC/RNC**); a system information estimation section that estimates system information of the second radio communication system from an output of the other system reception section(i.e., **the BS works in conjunction with the BSC to provide neighbor cell parameters**)(e.g., see at least **col. 4 lines 19-51**); and a switching is made between separate radio communication systems by informing the system estimation information of the second base station from the first base station to the mobile station in communications with the first base station(i.e., **inter-system HO**)(e.g., see at least **abstract and col. 2 lines 47-51, col. 4 lines 10-18**).

However, Holma does not specifically teach wherein a storage section that stores system estimation information being an output of the system information estimation section,

In analogous art, Chambert teaches wherein the storage section is included in the base-station (e.g., see at least **col. 6 lines 10-15**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Holma to include a base-station storage section for the purpose of handoff as taught by Chambert.

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Consider **claim 2 and 4 and as applied to claims 1 and 3**, Holma teaches wherein the mobile station includes a position detection section that detects position information of the mobile station(**i.e., position with respect to network areas**)(**e.g., see at least figure 1 and col. 5 lines 2 – col. 6 line 31**), the base station controller/RNC of the first radio communication system includes a storage section that stores the system detection information and the position information provided by the mobile station(**i.e., position with respect to network areas**) (**e.g., see at least figure 1 and col. 5 lines 2 – col. 6 line 31**), and a switching is made between the separate radio systems by informing the system detection information and the position information from the base station of the first radio communication system to the mobile station in the cell for communications by the base station of the first radio communication system(**i.e., inter-system HO**)(**e.g., see at least abstract and col. 2 lines 47-51, col. 4 lines 10-18**).

However, Holma does not specifically teach wherein the storage section is included in the base-station.

In analogous art, Chambert teaches wherein the storage section is included in the base-station (**e.g., see at least col. 6 lines 10-15**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Holma to include a base-station storage section for the purpose of handoff as taught by Chambert.

Consider **claims 5, 14, 22 and 24 and as applied to claims 2, 4, 13 and 21**, Holma as modified by Chambert teaches wherein the position detection section detects absolute position information (**i.e., absolute with respect to area**) (**e.g., see at least figure 1 and col. 5 lines 2 –**

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col. 6 line 31).

Consider **claims 6, 15, 23 and 25 and as applied to claims 2, 4, 13 and 21**, Holma as modified by Chambert, wherein the position detection section detects relative position information from the base station (**i.e., relative with respect to borders**) (**e.g., see at least figure 1 and col. 5 lines 2 – col. 6 line 31**).

Consider **claims 13 and 21 and as applied to claims 12 and 20**, Holma teaches wherein the mobile station includes a position detection section that detects position information of the mobile station(**i.e., position with respect to network areas**)(**e.g., see at least figure 1 and col. 5 lines 2 – col. 6 line 31**) wherein a switching is made between separate radio communication systems by storing the system detection information in the storage section when no communications are going on with the base station of the first radio communication system(**i.e., inter-system HO**)(**e.g., see at least abstract and col. 2 lines 47-51, col. 4 lines 10-18**), and by informing the system detection information stored in the storage section to the base station of the first radio communication system when communications are through with the base station of the second radio communication system (**i.e., note also that handover can also occur due to a change of radio resources providing a service without necessarily any change of the base stations involved as discussed in col. 4 lines 10-19**).

However, Holma does not specifically teach wherein the storage section is included in the base-station.

In analogous art, Chambert teaches wherein the storage section is included in the base-station (**e.g., see at least col. 6 lines 10-15**).

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Holma to include a base-station storage section for the purpose of handoff as taught by Chambert.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES SHEDRICK whose telephone number is (571)272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, V. Paul Harper can be reached on (571)-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles Shedrick/
Examiner, Art Unit 2617
September 22, 2008

/Lester Kincaid/
Supervisory Patent Examiner, Art Unit 2617